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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,382	06/26/2003	Gab Jac Lee	2950-0269P	4732
2292 7590 05/11/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER PHAM, VAN T	
			ART UNIT 2627	PAPER NUMBER
			NOTIFICATION DATE 05/11/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/606,382	LEE, GAB JAE	
	Examiner	Art Unit	
	VAN T. PHAM	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02/05/2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 13 is/are rejected.
- 7) ☒ Claim(s) 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's arguments filed 02/05/2007 has been fully considered are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (US 6,317,405) in view of Applicant admitted prior art (AAPA).

Regarding claim 1, the combination of AAPA and Arai, discloses a method for controlling an optical power level, comprising the steps of: a) increasing a control value of a driving signal generator for driving a pickup unit to output an optical power until the driving signal generator starts generate a driving voltage (see Arai col. 1 and Fig. Fig. 1, however, AAPA, discloses the microcomputer 30 sets up laser powers on the basis of a DAC offset value); and b) setting the increased control value at which the driving signal generator starts to generate the driving voltage as an offset value for setting up an optical power of the pickup unit (see Arai Figs. 1-2 and cols. 1, 4 and AAPA Fig. 2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a increasing a control value of a driving signal generator for driving a pickup unit in the admitted art as suggested by Arai, the motivation being in order to appropriately determine the power levels.

Regarding claim 2, the combination of AAPA and Arai, discloses the method as set forth in claim 1, wherein the driving signal of the driving signal generator is applied to a laser diode of the pickup unit, and a magnitude of the optical power is determined by a level of the driving signal (see AAPA Fig. 2 and Arai Fig. 4).

Regarding claim 3, the combination of AAPA and Arai, discloses the method as set forth in claim 1, wherein the offset value is stored in a nonvolatile memory (see the AAPA Fig. 2 and Arai col. 5).

Regarding claim 4, the combination of AAPA and Arai, discloses the method as set forth in claim 1, wherein the offset value is determined when an optical disc apparatus is initially driven (inherently).

Regarding claim 5, the combination of AAPA and Arai, discloses the combination of AAPA and Arai, discloses the method as set forth in claim 1, wherein the step (b) includes the steps of: b1) determining the control value at which the driving voltage of the driving signal generator reaches a predetermined voltage level; and b2) subtracting a predetermined value from the determined control value, and setting the subtracted result value as the offset value (see Arai Fig. 2 and AAPA Fig. 2).

Regarding claim 6, the combination of AAPA and Arai, discloses the method as set forth in claim 5, wherein the predetermined voltage level is within a threshold area of the driving voltage of the driving signal generator (inherently).

Regarding claim 7, the combination of AAPA and Arai, discloses the method as set forth in claim 1, further comprising the step of: c) calculating a control value for generating the

desired optical power of the pickup unit based on the offset value (see Arai Fig. 2 and AAPA Fig. 2).

Regarding claim 8, the combination of AAPA and Arai, discloses the method as set forth in claim 7, wherein the step (c) includes the steps of: c1) applying a predetermined control value and measuring a corresponding optical power of the pickup unit (inherently); and c2) calculating a control value for generating the desired optical power based on the predetermined control value, the measured optical power corresponding to the predetermined control value, and the offset value (see see Arai Fig. 2 and AAPA Fig. 2).

Regarding claim 13, see rejection of claim 1 and 8 and see Figs. 5, 11 and 20.

#### *Allowable Subject Matter*

3. Claims 9-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is allowable over prior art of record since it does not disclose or suggest all the limitations of claims 1, 7-8 as well as the limitation that the the control value for generating the specific driving signal level in the step (d2) is calculated by the following equation:  $4 \text{ DAC DSL} = \text{DAC offset} + \text{DSL DSL 1} \cdot \text{times. ( DAC 1 - DAC offset )}$ , where DSL is a driving signal level of the driving signal generator applied to the laser diode, DAC.sub.DSL is a control value for generating a value of DSL, DAC.sub.offset is an offset value, a DAC.sub.1 is a predetermined control value, and a DSL.sub.1 is a driving signal level in response to a value of DAC.sub.1.

Claim 10 is allowable over prior art of record since it does not disclose or suggest all the limitations of claims 1, 7 as well as the limitation that the control value for generating the desired

optical power is previously stored in a nonvolatile memory in the form of a difference between the control value and an offset value for setting up an the desired optical power.

Claims 11-12 are allowed with their parent claim 10.

***Cited References***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references related to optical disk recording and/or reproducing apparatus for performing optimizing operation for servo control with recording and/or reproducing operation;

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Van Pham whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am – 600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP

WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER